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JUL 26 2002

TECH CENTER 1600/2900

Underlined = deleted in targeting construct

Bold = sequence flanking Neo insert in targeting construct

AATATTTTCCTTGACCTAATGCCATCTTGTGTCCCCTTGCAGAGCCCTATTCCTAACATG
GCTGATGACTATGGCTCTGAATCCACATCTTCCATGGAAGACTACGTAACTTCAACTTC
ACTGACTTCTACTGTGAGAAAAACAATGTCAGGCAGTTTGCAGCCATTTCTCCACCC
TTGTACTGGCTCGTGTTCATCGTGGGTGCCCTTGGGCAACAGTCTTGTTAT CCTTGTCTAC
TGGTACTGCACAAGAGTGAAGACCATGACCGACATGTTCTTTTGAATTTGGCAATTGCT
GACCTCCTCTTTCTTGTCACTCTTCCCTTCTGGGCCATTGCTGCTGCTGACCAGTGGAAG
TTCCAGACCTTCATGTGCAAGGTGGTCAACAGCA **TGTACAAGATGAACTTCTACAGCTGT**
GTGTTGCTGATCATGTGCATCAGCGTGGACAGGTACATTGCCATTGCCCAGGCCATGAGA
GCACATACTTGGAGGGAGAAAAGGCTTTTGTACAGCAAAATGGTTTGCTTTACCATCTGG
GTATTGGCAGCTGCTCTCTGCATCCCAGAAATCTTATACAGCCAAATCAAGGAGGAATCC
GGCATTGCTATCTGCACCATGGTTTACCCTAGCGATGAGAGCACCAAATGAAGTCAGCT
GTCTTGACCCTGAAGGTCATTCTGGGGTCTTCCCTTCCCTTCGTGGTCATGGCTTGCTGC
TATACCATCATCATTACACCCTGATACAAGCCAAGAAGTCTTCCAAGCACAAAGCCCTA
AAAGTGACCATCACTGTCCTGACCGTCTTTGTCTTGTCTCAGTTTCCCTACAAGTGCATT
T TGTGTTGGTGCAGACCATTGACGCCTATGCCATGTTTATCTCCAAGTGTGCCGTTTCCACC
AACATTGACATCTGCTTCCAGGTCACCCAGACCATCGCCTTCTTCCACAGTTGCCTGAAC
CCTGTTCTCTATGTTTTTGTGGGTGAGAGATTCCGCCGGGATCTCGTGAAAACCCCTGAAG
AACTTGGGTTCATCAGCCAGGCCAGTGGGTTTCATTTACAAGGAGAGAGGAAGCTTG
AAGCTGTCGTCTATGTTGCTGGAGACAACCTCAGGAGCACTCTCCCTCTGAGGGGTCTTC
TCTGAGGTGCATGGTTCTTTTGGAAAGAAATGAGAAATACATGAAACAGTTTCCCCACTGA
TGGGACCAGAGAGAGTGAAGAGAGAAAAGAAAATCAGAAAGGGATGAATCTGAACTATAT
GATTACTTGTAGTCAGAAATTTGCCAAAGCAAAATATTTCAAAATCAACTGACTAGTGCAGG
AGGCTGTTGATTGGCTCTTGACTGTGATGCCCGCAATTCTCAAAGGAGGACTAAGGACCG
GCACTGTGGAGCACCTTGGCTTTGCCACTCGCCGGAGCATCAATGCCGCTGCCTCTGGAG
GAGCCCTTGGATTTTCTCCATGCACTGTGAACCTTCTGTGGCTTCAGTTCTCATGCTGCCT
CTTCCAAAAGGGGACACAGAAGCACTGGCTGCTGCTACAGACCGCAAAGCAGAAAGTTT
CGTGAAAATGTCCATCTTTGGGAAATTTTCTACCCTGCTCTTGAGCCTGATAACCCATGC
CAGGTCTTATAGATTCTGATCTAGAACCTTTCCAGGCAATCTCAGACCTAATTTCTTCT
TGTTCTCCTTGTTCTGTTCTGGGCCAGTGAAGGTCTTGTCTGATTTTGAAACGATCTG
CAGGTCTTGCCAGTGAACCCCTGGACAACCTGACCACACCCACAAGGCATCCAAAGTCTGT
TGGCTTCCAATCCATTTCTGTGTCCTGCTGGAGGTTTTAACCTAGACAAGGATTCCGCTT
ATTCTTGGTATGGTGACAGTGTCTCTCCATGGCCTGAGCAGGGAGATTATAACAGCTGG
GTTGCGCAGGAGCCAGCCTTGGCCCTGTTGTAGGCTTGTCTGTTGAGTGGCACTTGCTTT
GGGTCCACCGTCTGTCTGCTCCCTAGAAAATGGGCTGGTTCTTTTGGCCCTCTTCTTTCT
GAGGCCCACTTTATTCTGAGGAATACAGTGAGCAGATATGGGCAGCAGCCAGGTAGGGCA
AAGGGGTGAAGCGCAGGCCTTGCTGGAAGGCTATTTACTTCCATGCTTCTCCTTTTCTTA
CTCTATAGTGGCAACATTTTAAAAGCTTTTAACTTAGAGATTAGGCTGAAAAAATAAGT
AATGGAATTCACCTTTGCATCTTTTGTGTCTTTCTTATCATGATTTGGCAAAATGCATCA
CCTTTGAAAATATTTACATATTGGAAAAGTGCTTTTAAATGTGTATATGAAGCATTAAT
TACTTGTCACCTTTCTTTACCCTGTCTCAATATTTTAAAGTGTGTGCAATTAAAGATCAAAT
AGATACATTAAGAGTGTGAAGGCTGGTCTGAAGGTAGTGAGCTATCTCAATCGGATTGTT
CACACTCAGTTACAGATTGAACTCCTTGTCTACTTCCCTGCTTCTCTCTACTGCAATTG
ACTAGTCTTTAAAAAAAAGTGTGAAGAGTAAGCAATAGGGATAAGGAAATAAGATCT

(SEQ ID NO: 1)

FIGURE 2A



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AATATTTTCCTTGACCTAATGCCATCTTGTGTCCCCTTGCAGAGCCCTATTCCTAACATG
GCTGATGACTATGGCTCTGAATCCACATCTTCCATGGAAGACTACGTTAACTTCAACTTC
ACTGACTTCTACTGTGAGAAAAACAATGTCAGGCAGTTTGGGAGCCATTTCTCCCACCC
TTGTAAGTGGCTCGTGTTCATCGTGGGTGCCCTTGGGCAACAGTCTTGTAT CCTTGTCTAC
TGGTACTGCACAAGAGTGAAGACCATGACCGACATGTTCCCTTTTGAATTTGGCAATTGCT
GACCTCCTCTTTCTTGTCACTCTTCCCTTCTGGGCCATTGCTGCTGCTGACCAAGTGAAG
TTCCAGACCTTCATGTGCAAGGTGGTCAACAGCA **TGTACAAGATGAACTTCTACAGCTGT**
GTGTTGCTGATCATGTGCATCAGCGTGGACAGGTACATTGCCATTGCCCAGGCCATGAGA
GCACATACTTGGAGGGAGAAAAGGCTTTTGTACAGCAAAATGGTTTGCTTTACCATCTGG
GTATTGGCAGCTGCTCTCTGCATCCCAGAAATCTTATACAGCCAAATCAAGGAGGAATCC
GGCATTGCTATCTGCACCATGGTTTACCCTAGCGATGAGAGCACCAAATGAAGTCAGCT
GTCTTGACCCTGAAGGTCATTCTGGGGTTCTTCCCTTCCCTTCGTGGTTCATGGCTTGCTGC
TATACCATCATCATTACACCCCTGATACAAGCCAAGAAGTCTTCCAAGCACAAAGCCCTA
AAAGTGACCATCACTGTCCTGACCGTCTTTGTCTTGTCTCAGTTTCCCTACAAGTGCATT
T TGTGGTGCAGACCATTGACGCCTATGCCATGTTTCATCTCCAAGTGTGCCGTTTCCACC
AACATTGACATCTGCTTCCAGGTCACCCAGACCATCGCTTCTTCCACAGTTGCCTGAAC
CCTGTTCTCTATGTTTTTGTGGGTGAGAGATTCCGCCGGGATCTCGTGAAAACCCTGAAG
AACTTGGGTGTCATCAGCCAGGCCAGTGGGTTTCATTTACAAGGAGAGAGGGAAGCTTG
AAGCTGTCGTCTATGTTGCTGGAGACAACCTCAGGAGCACTCTCCCTCTGAGGGGTCTTC
TCTGAGGTGCATGGTTCTTTTGAAGAAATGAGAAATACATGAAACAGTTTCCCCACTGA
TGGGACCAGAGAGAGTGAAGAGAAAAGAAAATCAGAAAGGGATGAATCTGAACTATAT
GATTACTTGTAGTCAGAATTTGCCAAAGCAAATATTTCAAATCAACTGACTAGTGCAGG
AGGCTGTTGATTGGCTCTTGACTGTGATGCCCCGAATTCTCAAAGGAGGACTAAGGACCG
GCACTGTGGAGCACCCCTGGCTTTGCCACTCGCCGGAGCATCAATGCCGCTGCCTCTGGAG
GAGCCCTTGGATTTTCTCCATGCACTGTGAACCTTCTGTGGCTTCAGTTCTCATGCTGCCT
CTTCCAAAAGGGGACACAGAAGCACTGGCTGCTGCTACAGACCGCAAAGCAGAAAGTTT
CGTGAAAATGTCCATCTTTGGGAAATTTTCTACCCTGCTCTTGAGCCTGATAACCCATGC
CAGGTCTTATAGATTCTTGATCTAGAACCTTTCCAGGCAATCTCAGACCTAATTTCTTCT
TGTTCTCCTTGTCTGTTCTGGGCCAGTGAAGGTCTTGTCTGATTTTGAAACGATCTG
CAGGTCTTGCCAGTGAACCCCTGGACAACCTGACCACACCCACAAGGCATCCAAAGTCTGT
TGGCTTCCAATCCATTTCTGTGTCTGCTGGAGGTTTTAACCTAGACAAGGATTCCGCTT
ATTCTTGGTATGGTGACAGTGTCTCTCCATGGCCTGAGCAGGGAGATTATAACAGCTGG
GTTCCGAGGAGCCAGCCTTGGCCCTGTTGTAGGCTTGTCTGTTGAGTGGCACTTGCTTT
GGGTCCACCGTCTGTCTGCTCCCTAGAAAATGGGCTGGTTCTTTTGGCCCTCTTCTTTCT
GAGGCCCACTTTATTCTGAGGAATACAGTGAGCAGATATGGGCAGCAGCCAGGTAGGGCA
AAGGGGTGAAGCGCAGGCCTTGCTGGAAGGCTATTTACTTCCATGCTTCTCCTTTTCTTA
CTCTATAGTGGAACATTTTAAAGCTTTTAACTTAGAGATTAGGCTGAAAAAATAAGT
AATGGAATTCACCTTTGCATCTTTTCTGCTCTTCTTATCATGATTTGGCAAAATGCATCA
CCTTTGAAAATATTTACATATTGCAAAAGTGCTTTTAAATGTGTATATGAAGCATTAAT
TACTTGTCACCTTTCTTACCCTGTCTCAATATTTTAAAGTGTGTGCAATTAAAGATCAAAT
AGATACATTAAGAGTGTGAAGGCTGGTCTGAAGGTAGTGAGCTATCTCAATCGGATTGTT
CACACTCAGTTACAGATTGAACTCCTTGTCTACTTCCCTGCTTCTCTCTACTGCAATTG
ACTAGTCTTTAAAAAAAGTGTGAAGAGTAAGCAATAGGGATAAGGAAATAAGATCT
(SEQ ID NO:1)

FIGURE 2A